

VIA ELECTRONIC MAIL

May 11, 2010

Mr. Shawn Ghose, EPA Project Coordinator
Superfund AR/LA Enforcement Section (6FF-RA)
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202

Subject: Dioxin and Furan Questions
Arkwood, Inc. Site
Omaha, Arkansas

Dear Mr. Ghose:

Per your recent request, please see the following information pertaining to dioxins and furans at the Arkwood Site:


- 1) The Arkwood, Inc. Site operated as a wood-treating facility from 1962-1984.
- 2) The Remedial Investigation for the site was completed in February 1990. Dioxin and furan results are discussed as follows:
 - a. A total of 34 soil and three sediment samples were analyzed for chlorinated dibenzodioxins and dibenzofurans, tetra through octa isomers. The concentrations tabulated in Tables 4-6 and 4-8 represent the 2378-TCDD and TCDF equivalence totals as calculated using toxicity equivalence factors (TEFs) in accordance with EPA guidance (Bellin and Barnes, 1986). (See Draft Endangerment Assessment, Table 3-1). Dioxin concentrations were highest within surficial soils and wastes of the railroad ditch, ranging from 4.8-11 ppb in four samples. (Surficial soils defined as ranging from zero to three feet in depth.) Dioxin concentrations in surficial soils of the rest of the site including the trolley/treatment area, wood storage yard, wood chip pile and ash pile, ranged from 0.10-4.8 ppb in 13 samples. A total of 14 samples from depths of greater than three feet, representing all areas of the site, contained dioxin concentrations ranging from 0.00024-0.28 ppb. Furan concentrations were found to be less than 1 ppb regardless of sample location or depth except for a single 1.4 ppb concentration reported from AP [ash pile]-9.
- 3) The Feasibility Study for the site was completed in March 1990. Dioxin results are discussed as follows:
 - a. Chlorinated dibenzodioxins were found in very low concentrations in portions of the site. No tetrachlorodibenzo-p-dioxins (TCDD), including the 2,3,7,8-TCDD

isomer, are present at the site. The distribution of chlorinated dibenzodioxins correlates well with that of PCP [pentachlorophenol], so that PCP is a good indicator for these compounds.

- 4) The Remedial Objective for dioxin as defined by the ROD was 20 µg/kg dioxin as 2,3,7,8-TCDD (Tetrachlorodibenzo-p-dioxin) equivalents.
- 5) Boundary samples were collected around the excavated areas during implementation of the Remedial Action in 1994 and 1995. Dioxin concentrations in the boundary samples ranged from 1.43 µg/kg to 16.75 µg/kg 2,3,7,8-TCDD equivalents.
- 6) Confirmatory sampling conducted to confirm lateral and vertical excavation extent during implementation of the Remedial Action measured dioxin concentrations ranging from 0.22 µg/kg to 10.98 µg/kg 2,3,7,8-TCDD equivalents.
- 7) Excavations were filled with coarse material with dioxin concentrations ranging from 3.19 ug/kg to 10.24 µg/kg 2,3,7,8-TCDD equivalents.
- 8) The entire site (not just the excavated areas) is covered with six inches of clean top soil and vegetated. The top soil was obtained from a property in Harrison, AR associated with the expansion of the Walmart facility. The topsoil was tested and determined to be free of contamination. The site is fenced and maintained.

If you have any questions regarding this correspondence, please do not hesitate to contact me at (608) 848-4134.

Sincerely,



Jean A. Mescher, Project Coordinator
Director, Environmental Services

Copy:

- Frank Robinson, McKesson Corporation (electronic copy)
- Carole Ungvarsky, McKesson Corporation (“ “)